U.S. Department
of Transportation
**Federal Aviation
Administration**

SDR Summary

Service Difficulty Reporting

January 25, 1998 - January 31, 1998

GENERAL AVIATION, ZAC-327

You can improve Air Safety by reporting the problem when you see it!

SECTION

ISSUE: 98-05

U.S. Department of Transportation
Federal Aviation Administration

SDR SUMMARY

General Aviation, ZAC-327

This summary includes domestic (United States) Service Difficulty Reports (SDRs) entered into the data base for aircraft weighing 12,500 lbs. and below. It also includes reports on aeronautical products (engines, propellers, and components), and all helicopters. A separate section for International SDRs for aircraft weighing 12,500 lbs. and under has also been included. Under a data exchange agreement, International SDRs are submitted to the FAA by the Civil Aviation Authority of other countries (currently, Canada - CAN, and Australia - AUS). All reports are sorted by aircraft make, model group (basic model), and Joint Aircraft System/Component (JASC) code. Within each aircraft model group, the specific model shown may vary, but similar types of reports will be grouped together and listed in ascending order by their JASC code. Each field contains all information submitted to the FAA. Some fields are not included in order to make the summary easier to read. Additional information may be obtained by referring to the "operator control number." Send your request to the Aviation Data Systems Branch, AFS-620 at the address or phone below.

The Regulatory Support Division (AFS-600) has established a "HomePage" on the Internet through which the same information is available. There is a large quantity of other information available through the AFS-600 HomePage such as the most current SDR system codes (i.e., Joint Aircraft System\Component Codes). The SDR Question and Answer Section of the Summary will also be transferred to the AFS-600 HomePage to simplify the process of preparing the SDR Summaries in the PDF format each week. There are "hot buttons" to take you to other locations and sites where FAA Flight Standards Service Information is available. The AFS-600 "HomePage" address is:

http://www.mmac.jccbi.gov/afs/afs600

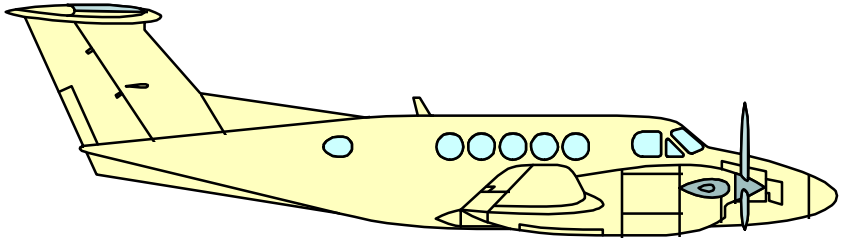
"The Service Difficulty Reports in this publication are derived from unverified information submitted by the aviation community without FAA verification for accuracy. The number of SDRs submitted is not an indication of the mechanical reliability or fitness of an airline or individual operator, and the information should not be used as such."

Comments are welcomed and may be directed to:

Federal Aviation Administration
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125-5029
Phone: (405) 954-4171, Fax: (405) 954-4748

Your continued participation is essential and is an integral part of ensuring aviation safety. Thank you for supporting the Service Difficulty Program! If you have any questions regarding this special notice you can contact John Jackson at (405) 954-6486, or Jim Gillespie at (405) 954-1141, or Blake McDonald at (405) 954-0307 in the Aviation Systems Branch (AFS-620). Their E-mail addresses are:

john_e_jackson@mmacmail.jccbi.gov **james_gillespie@mmacmail.jccbi.gov** **blake_mcdonald@mmacmail.jccbi.gov**



SIGNIFICANT OCCURRENCE REPORT

U.S. Department
of Transportation
Federal Aviation Administration

THE SIGNIFICANT OCCURRENCE REPORT

The Significant Occurrence Report is a compilation all of the star bordered reports that appear in the General Aviation Service Difficulty Report (SDR) Summary, ZAC-327. The Significant Occurrence Report is used to highlight industry problem areas to field inspectors and the aviation public.

Limited analysis is performed by the Aviation Data Systems Branch, AFS-620 during the preparation of the "Significant Occurrence Report", which is generated each week and is included in the front of the Air Carrier SDR Summary. Significant Reports are hand selected by AFS-620's inspectors based on the individual merit of each report. The criteria for selection includes, but is not limited to, items that indicate high failure rates; items related to accidents or incidents; or design or maintenance failures which may affect the safe operation of the aircraft.

In some cases, this limited analysis of SDR data leads to the preparation of information bulletins which are routed to the appropriate product certification office for further investigation of the problem. The end result may be the issuance of an airworthiness directive (AD) by the Aircraft Certification Service (AIR) if warranted.

The Significant Occurrence Report (section I) of the weekly SDR Summary is not intended to be a summary of all significant events and should not be used as such. We recommend that you review further the applicable sections of the SDR summary that may be of interest.

GENERAL AVIATION SIGNIFICANT OCCURRENCE REPORT

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
5312	222HX	BELL				BULKHEAD	CRACKED		1/14/98
RMXA	47533	222U				222031056103	BS 270		98ZZZX324
*****	FOUND 2 EACH CRACKS IN AFT MAIN ROOF BEAM AT LT NODAL BEAM SUPPORT. BS 270, WL 79.0, LBL 9.90.								
3310	403ER	CESSNA				DIMMER ASSY	MISWIRED	34	12/1/97
N3XR	17280245	172R				15703014	INST LIGHTS		98ZZZX359
*****	DURING A TRAINING FLIGHT, THE CREW SMELLED A BURNING SCENT. AFTER FOLLOWING THE EMERGENCY CHECKLIST, THEY WERE GOING TO LAND OFF-FIELD. THE SMELL DIMINISHED AND THEY PROCEEDED TO X-47. DURING THE FOLLOWING INSPECTION, A RESISTOR WAS FOUND BURNED IN HALF ON THE DIMMER ASSY. IT WAS DISCOVERED THE UNIT IS WIRED INCORRECTLY. IT APPEARS TO BE A FLEET PROBLEM. AFTER A CALL TO CESSNA, DISABLED THE DIMMERS IN THE ENTIRE FLEET. SB 97-33-01 APPLIES.								
5512	732XE	CESSNA				RIB	CRACKED	3197	1/7/98
	2061850	T210M			123260029		H STAB LT/RT		98ZZZX318
*****	DURING ANNUAL INSPECTION, A CLICKING NOISE WAS HEARD WHILE PRESSING THE LEADING EDGE OF THE HORIZONTAL STABILIZER AT THE RIBS. WITH FURTHER INSPECTION, SEVERAL RIBS FOUND CRACKED ON BOTH LT AND RT SIDES OF THE STABILIZER. ALSO, FOUND ON THIS ACFT, RIB PN 1232105-1 HAS BEEN BENT. THIS IS 3RD T210 THAT HAS BEEN FOUND WITH CRACKED LEADING EDGE RIBS AND ALSO FOUND SEVERAL TU206 ACFT WITH THIS SAME CONDITION. IT APPEARS THAT YEARS OF PUSHING ON STAB DURING GROUND HANDLING HAS HELPED TO CREATE THIS CONDITION. TT ON ALL ACFT IS APPROXIMATELY 3,000 HRS.								
3060	340MT	CESSNA				BREAKER	FAILED		12/15/97
	340A0741	340A				W31X2M1620	PROPELLER DEICE		98ZZZX349
*****	PROPELLER DE-ICE WAS SELECTED ON AIRCRAFT CLIMBING THROUGH SNOW FLURRIES. THE PROPELLER DE-ICE PIGTAIL WIRES AT PROPELLER HUB WERE SHORTED TO THE SPINNER. THIS CAUSED SMOKE IN THE COCKPIT. AIRCRAFT RETURNED AND MADE AN UNEVENTFUL LANDING. THE PROPELLER DE-ICE CIRCUIT BREAKER DID NOT TRIP TO THE OFF OR OPEN POSITION ALLOWING THE WIRING FROM THE CIRCUIT BREAKER TO THE DE-ICE GAUGE TO BURN IN TWO.								
5320	29MM	CESSNA				DOUBLER	CRACKED	7936	12/15/97
HBCA	402B0863	402B				52130452	NLG RT WELL SKIN		98ZZZX347
*****	DURING A 100-HOUR INSPECTION, THE MECHANIC NOTICED A TEAR IN THE RIGHT SIDE OF THE NOSE GEAR WHEELWELL SKIN UNDER THE DOWNLOCK HINGE BRACKET (CESSNA BRACKET PART 0842105-2). THE DOUBLER THAT ATTACHES TO THE SKIN/BRACKET ASSEMBLY (DOUBLER CESSNA PART 5213045-2) WAS ALSO CRACKED/BROKEN. SUBMITTER STATED THIS PROBLEM IS MOST COMMONLY FOUND ON THE LEFT SIDE, THE ABOVE MENTIONED BRACKET ON THE LEFT SIDE ACTUATES OR CYCLES THE GEAR. THE PROBLEM COULD BE ASSOCIATED WITH ICE BUILDING (OR FORMING) ON THE LEADING EDGES OF GEAR DOORS CAUSING A PARTIAL BIND WHEN TRYING TO CYCLE THE GEAR.								
3244	2427W	PIPER			MCCREARY	TIRE	CHAFED		12/19/97
	311104005	PA31T1			65010	30855	MLG		98ZZZX358
*****	INSTALLED TIRE ON WHEEL, NOTICED MINIMUM CLEARANCE ON SIDEWALL TIRE HAS TWO GROOVES CUT IN IT BY THE BRAKES. SUBMITTER STATED TIRE IS A DIFFERENT SHAPE THAN A GOODYEAR TIRE.								

(End of GENERAL AVIATION SIGNIFICANT OCCURRENCE REPORT)

Run Date: 05-Feb-98

FEDERAL AVIATION ADMINISTRATION

SIGNIFICANT OCCURRENCE REPORT INDEX

Showing Specific Part Numbers and Aircraft Model by Year

FOR THE PERIOD OF: 1/25/98 To 1/31/98

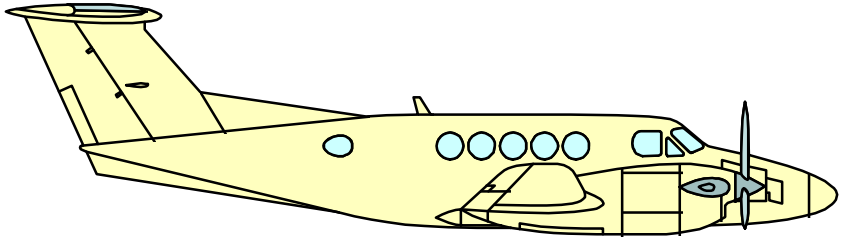
PART NUMBER / PART NAME	ACFT MODEL	TOTAL	YEAR 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
15703014														
DIMMER ASSY	172R	**1**	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 15703014		**1**	-	-	-	-	-	-	-	-	-	-	-	1
222031056103														
BULKHEAD	222U	**1**	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 222031056103		**1**	-	-	-	-	-	-	-	-	-	-	-	1
30855														
TIRE	PA31T1	**1**	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 30855		**1**	-	-	-	-	-	-	-	-	-	-	-	1
51590000														
ACM	JETSTM3201	**1**	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 51590000		**1**	-	-	-	-	-	-	-	-	-	-	-	1
52130452														
DOUBLER	402B	**1**	-	-	-	-	-	-	-	-	-	-	-	1
	414	**2**	-	-	-	-	-	-	-	-	-	-	1	1
	421B	**1**	-	-	-	-	-	-	1	-	-	-	-	-
SUPPORT	404CESSNA	**1**	-	-	-	-	1	-	-	-	-	-	-	-
TOTAL of # 52130452		**5**	-	-	-	-	1	-	1	-	-	-	1	2
67420607														
STRUT	750	**1**	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 67420607		**1**	-	-	-	-	-	-	-	-	-	-	-	1
W31X2M1620														
BREAKER	340A	**1**	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # W31X2M1620		**1**	-	-	-	-	-	-	-	-	-	-	-	1

PART NUMBER / PART NAME	ACFT MODEL	TOTAL	YEAR 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
TOTAL for ALL (10) PART NUMBERS: - - - -		**11**	-	-	-	-	1	-	1	-	-	-	1	8

END OF SIGNIFICANT OCCURRENCE REPORT INDEX

DOMESTIC

SERVICE DIFFICULTY REPORT



DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
3340	72567	BEECH				WIRE	SHORTED	1272	1/9/98
	E2280	A36					NAV LIGHT		98ZZZX353
	RT NAVIGATION LIGHT POWER WIRE ROUTED THROUGH WING ALONG CHANNEL UNDER TOP WING SKIN. NOTHING TO SECURE WIRE IN PLACE AND NO CHAFE PROTECTION PROVIDED. WIRE CAME OUT OF CHANNEL, CHAFED ON RIB EVENTUALLY CAUSING A SHORT AND BURNED WIRE IN TWO. INSPECTION OF LT SIDE REVEALED SAME PROBLEM, BUT HAS NOT CHAFED THROUGH YET. PROBLEM RESOLVED BY ADDING CHAFE PROTECTION AND RE-ROUTING WIRE. THIS AREA CANNOT BE INSPECTED WITHOUT REMOVING WING TIP.								
3244	228RA	BEECH				TIRE	IMBALANCE	66	1/9/98
	LW197	E90				65X10	NLG		98ZZZX338
	TIRE SUDDENLY BECAME UNBALANCED DUE TO THE RUBBER BALANCE PATCH ON THE INTERIOR BECOMING DETACHED. SUBMITTER STATED MANUFACTURER'S DEFECT. 92 LANDINGS, 1.8 MONTHS IN SERVICE. NORMAL OPERATING CONDITIONS.								
3244	987GM	BEECH				TIRE	IMBALANCE	185	1/9/98
	LW65	E90				850X10	MLG		98ZZZX342
	TIRE SUDDENLY BECAME UNBALANCED DUE TO THE RUBBER BALANCE PATCH ON THE INTERIOR BECOMING DETACHED UNDER NORMAL CONDITIONS, 281 LANDINGS, 185 HOURS, 3.7 MONTHS IN SERVICE. SUBMITTER STATED MANUFACTURER'S DEFECT.								
3310	403ER	CESSNA				DIMMER ASSY	MISWIRED	34	12/1/97
N3XR	17280245	172R				15703014	INST LIGHTS		98ZZZX359
*****	DURING A TRAINING FLIGHT, THE CREW SMELLED A BURNING SCENT. AFTER FOLLOWING THE EMERGENCY CHECKLIST, THEY WERE GOING TO LAND OFF-FIELD. THE SMELL DIMINISHED AND THEY PROCEEDED TO X-47. DURING THE FOLLOWING INSPECTION, A RESISTOR WAS FOUND BURNED IN HALF ON THE DIMMER ASSY. IT WAS DISCOVERED THE UNIT IS WIRED INCORRECTLY. IT APPEARS TO BE A FLEET PROBLEM. AFTER A CALL TO CESSNA, DISABLED THE DIMMERS IN THE ENTIRE FLEET. SB 97-33-01 APPLIES.								
5720	1682C	CESSNA				BEARING BLOCK	CORRODED	3706	12/31/97
	30382	180				0512122	RT AFT BLOCK		98ZZZX344
	RIGHT REAR BLOCK IN REAR CARRY-THROUGH BULKHEAD CORRODED IN BOLT HOLE AND INTERGRANULAR CORROSION IN BLOCK.								
2434	86109	CESSNA	CONT		FORD	ALTERNATOR	FAILED		1/15/98
	18503153	A185F	IO520D			315	DC SYSTEM	699	98ZZZX354
	ALTERNATOR QUIT WORKING. FOUND BRUSHES TOTALLY WORN OUT.								
2434	4640E	CESSNA			FORD	ALTERNATOR	FAILED		1/14/98
	18503824	A185F				318	DC SYSTEM	563	98ZZZX350
	ALTERNATOR FAILED. FOUND BRUSHES COMPLETELY WORN OUT.								
2434	61423	CESSNA			FORD	ALTERNATOR	FAILED		1/15/98
	18504180	A185F				318	DC SYSTEM	609	98ZZZX352
	ALTERNATOR FAILED. FOUND BRUSHES COMPLETELY WORN OUT.								
3260	5515Y	CESSNA				SWITCH	CRACKED		12/1/97
	21064233	T210N				YZ2RN7T	NLG UPLOCK		98ZZZX356
	NOSE GEAR UPLOCK SWITCH PLUNGER CRACKS AT INSERT (PLASTIC). SECOND AIRCRAFT IN LAST YEAR WITH THIS PROBLEM DISCOVERED DURING ANNUAL INSPECTION. THIS CRACKING PERMITS MOISTURE INSIDE THE HOUSING CAUSING ERRONEOUS UNLOCK INDICATIONS IN COCKPIT WHEN GEAR IS ACTUALLY UP AND LOCKED.								
5512	732XE	CESSNA				RIB	CRACKED	3197	1/7/98
	2061850	T210M			123260029		H STAB LT/RT		98ZZZX318
*****	DURING ANNUAL INSPECTION, A CLICKING NOISE WAS HEARD WHILE PRESSING THE LEADING EDGE OF THE HORIZONTAL STABILIZER AT THE RIBS. WITH FURTHER INSPECTION, SEVERAL RIBS FOUND CRACKED ON BOTH LT AND RT SIDES OF THE STABILIZER. ALSO, FOUND ON THIS ACFT, RIB PN 1232105-1 HAS BEEN BENT. THIS IS 3RD T210 THAT HAS BEEN FOUND WITH CRACKED LEADING EDGE RIBS AND ALSO FOUND SEVERAL TU206 ACFT WITH THIS SAME CONDITION. IT APPEARS THAT YEARS OF PUSHING ON STAB DURING GROUND HANDLING HAS HELPED TO CREATE THIS CONDITION. TT ON ALL ACFT IS APPROXIMATELY 3,000 HRS.								

******* DENOTES SIGNIFICANT OCCURRENCE**

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
3060	340MT	CESSNA				BREAKER	FAILED		12/15/97
	340A0741	340A				W31X2M1620	PROPELLER DEICE		98ZZZX349
*****	PROPELLER DE-ICE WAS SELECTED ON AIRCRAFT CLIMBING THROUGH SNOW FLURRIES. THE PROPELLER DE-ICE PIGTAIL WIRES AT PROPELLER HUB WERE SHORTED TO THE SPINNER. THIS CAUSED SMOKE IN THE COCKPIT. AIRCRAFT RETURNED AND MADE AN UNEVENTFUL LANDING. THE PROPELLER DE-ICE CIRCUIT BREAKER DID NOT TRIP TO THE OFF OR OPEN POSITION ALLOWING THE WIRING FROM THE CIRCUIT BREAKER TO THE DE-ICE GAUGE TO BURN IN TWO.								
5320	29MM	CESSNA				DOUBLER	CRACKED	7936	12/15/97
HBCA	402B0863	402B				52130452	NLG RT WELL SKIN		98ZZZX347
*****	DURING A 100-HOUR INSPECTION, THE MECHANIC NOTICED A TEAR IN THE RIGHT SIDE OF THE NOSE GEAR WHEELWELL SKIN UNDER THE DOWNLOCK HINGE BRACKET (CESSNA BRACKET PART 0842105-2). THE DOUBLER THAT ATTACHES TO THE SKIN/BRACKET ASSEMBLY (DOUBLER CESSNA PART 5213045-2) WAS ALSO CRACKED/BROKEN. SUBMITTER STATED THIS PROBLEM IS MOST COMMONLY FOUND ON THE LEFT SIDE, THE ABOVE MENTIONED BRACKET ON THE LEFT SIDE ACTUATES OR CYCLES THE GEAR. THE PROBLEM COULD BE ASSOCIATED WITH ICE BUILDING (OR FORMING) ON THE LEADING EDGES OF GEAR DOORS CAUSING A PARTIAL BIND WHEN TRYING TO CYCLE THE GEAR.								
8120	5040Q	CESSNA				BRACKET	BROKEN		12/15/97
HBCA	402B0347	402B				08511393	RT TURBO MOUNT		98ZZZX351
	DURING A 100-HOUR INSPECTION, MECHANIC FOUND THE RIGHT TURBO MOUNTING BRACKET BROKEN. CESSNA BRACKET 0851139-3 HAD ITS OUTBOARD LOWER ATTACH LEG BROKEN OFF. UNABLE TO DETERMINE THE CAUSE OF THIS PROBLEM.								
7931	500UB	GULSTM				SWITCH	LEAKING	2685	12/22/97
BXSR	5600052	560				98087	LT ENG OIL PRESS		98ZZZX316
	LARGE AMOUNTS OF OIL WERE LEAKING FROM THE RT ENGINE. FOUND THE OIL PRESSURE SWITCH INTERNAL SEAL HAD FAILED.								
5711	2013B	LUSCOM				SPAR	CORRODED	3599	1/2/98
	6440	8A				0822031	WING ROOT		98ZZZX346
	DURING ACCOMPLISHMENT OF AD 96-24-17 (AMEND NR 39-9841 EFF 1-27-97) INTERGRANULAR CORROSION WAS FOUND ON THE REAR SPAR APPROXIMATELY 12 INCHES OUTBOARD OF WING ATTACH POINTS ON THE REAR SURFACE TOP OF REAR SPAR. AREA WAS SLIGHTLY BULGED WITH A .50 INCH IN DIAMETER PIT WITH FLAKING ALUMINUM INSIDE THE DEFECT.								
5751	1895B	LUSCOM				HINGE FITTING	MISMANUFACTURED		12/31/97
FE6R	6322	8F			U582731	U18279	RT AIL CENTER		98ZZZX345
	A NEW FAA PMA RIGHT AILERON IS PURCHASED FROM UNIVAIR AIRCRAFT FOR INSTALLATION ON AIRCRAFT. THE AILERON WOULD NOT FIT ON THE AIRCRAFT AS RECEIVED DUE TO MISALIGNMENT OF THE CENTER HINGE FITTING. NO OTHER AILERON WAS AVAILABLE FROM THIS MANUFACTURER. THE MANUFACTURER SHIPPED AN UNDRILLED CENTER HINGE FITTING P/N U18279 WHICH WAS INSTALLED ON THE NEW AILERON. SUBSEQUENT OPERATION WAS NORMAL.								
5310	6410Z	PIPER				FRAME	CORRODED	3006	1/9/97
	25546	PA25					FUSELAGE		98ZZZX312
	CORROSION AT TUBING CLUSTER 27 INCHES AFT OF FIREWALL ON LOWER LONGERON. GUSSETS SUPPORTING THE VERTICAL MEMBER HAD ALLOWED DEBRIS AND MOISTURE TO COLLECT ON LONGERON. LONGERON WAS PERFORATED BY RUST FORE AND AFT OF VERTICAL MEMBER ON RT SIDE. A SMALLER PERFORATION EXISTED IN FRONT OF VERTICAL MEMBER ON LT SIDE. GUSSET AREA APPARENTLY FILLED WITH A SEALANT AT TIME OF MFG. THIS HAD BEEN REMOVED AND RTV SUBSTITUTED IN ITS PLACE. SUBMITTER BELIEVES CORROSION EXISTED PRIOR TO RTV APPLICATION.								
3244	2427W	PIPER			MCCREARY	TIRE	CHAFED		12/19/97
	311104005	PA31T1			65010	30855	MLG		98ZZZX358
*****	INSTALLED TIRE ON WHEEL, NOTICED MINIMUM CLEARANCE ON SIDEWALL TIRE HAS TWO GROOVES CUT IN IT BY THE BRAKES. SUBMITTER STATED TIRE IS A DIFFERENT SHAPE THAN A GOODYEAR TIRE.								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS

1/25/98 - 1/31/98 ISSUE: 98-05 ZAC-327

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
3340	206MH	BELL				SEARCH LIGHT	FAILED		12/4/97
TI1R	45426	206L				SX5	NOSE SECTION		98ZZZX367
	SEARCH LIGHT TURNS OFF IN-FLIGHT AND SOMETIMES WILL NOT RE-START. REMOVED AND REPLACED.								
3453	206MH	BELL				LORAN	CRACKED		12/4/97
TI1R	45426	206L			KLN89	066011481111	FACEPLATE		98ZZZX329
	LORAN FACE PLATE DISPLAY CRACKED. REMOVED AND REPLACED.								
7323	9907K	BELL	ALLSN			GOVERNOR	FAILED		1/6/98
LS1R	2040	206B	250C20			252466712	ENGINE PT	1576	98ZZZX323
	GOVERNOR SLOW TO RESPOND TO POWER CHANGES (HIGH AND LOW SIDE).								
7323	206MH	BELL	ALLSN			GOVERNOR	FAILED	236	12/1/97
TI1R	45426	206L	250C28B		23004545	23004836	ENGINE		98ZZZX330
	GOVERNOR REMOVED FOR TORQUE SPIKES WITH POWER CHANGES. COMPONENT OF ENGINE 23004545, S/N CAE890566. REMOVED AND REPLACED.								
7532	721SP	BELL	ALLSN			BLEED VALVE	FAILED	618	11/17/97
TI1R	45486	206L	250C30			23005366	ENGINE		98ZZZX336
	ENGINE HAD COMPRESSOR STALL AT LOW POWER. REMOVED AND REPLACED BLEED VALVE.								
5312	222HX	BELL				BULKHEAD	CRACKED		1/14/98
RMXA	47533	222U				222031056103	BS 270		98ZZZX324
*****	FOUND 2 EACH CRACKS IN AFT MAIN ROOF BEAM AT LT NODAL BEAM SUPPORT. BS 270, WL 79.0, LBL 9.90.								
2312	495LF	BOLKMS				TRANSCEIVER	MALFUNCTION		12/4/97
TI1R	S645	BO105S			KY196	064101900	COCKPIT		98ZZZX334
	UNABLE TO AJDUST SIDE TONE/MIC GAIN DOWN TO A SUITABLE LEVEL TO MATCH OUTPUT OF OTHER AVIONICS EQUIPMENT. REMOVED AND REPLACED.								
3425	117LU	BOLKMS				INDICATOR	FAILED		12/21/97
TI1R	7144	BK117B1				5204210002	HSI		98ZZZX365
	HSI INDICATOR ROTATES CLOCKWISE. REMOVED AND REPLACED.								
3453	460H	BOLKMS				LORAN	FAILED		11/10/97
TI1R	7142	BK117B1			612B	4309805000	COCKPIT		98ZZZX333
	LORAN HEADINGS AND MILEAGE INCORRECT. RE: RMA 652062. REMOVED AND REPLACED.								
3610	527MB	BOLKMS				VALVE	FAILED		12/8/97
TI1R	7103	BK117A3				97914211	BLEED SOV		98ZZZX335
	VALVE INOPERATIVE. REMOVED AND REPLACED.								
3120	317MC	BOLKMS				CLOCK	FAILED		11/19/97
TI1R	7505	BK117C1				JB15307	COCKPIT		98ZZZX368
	CLOCK LOSES TIME, RUNS SLOW. REMOVED AND REPLACED.								
3213	317MC	BOLKMS				SKID	WORN		10/18/97
TI1R	7505	BK117C1				1175000211	GEAR SKID		98ZZZX332
	SKID PROTECTIVE WORN BEYOND LIMITS. REMOVED AND REPLACED.								

******* DENOTES SIGNIFICANT OCCURRENCE**

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
3213	317MC	BOLKMS				SKID	WORN		10/18/97
TI1R	7505	BK117C1				1175000212	GEAR SKID		98ZZZX331
	PROTECTIVE SKID WORN BEYOND LIMITS. REMOVED AND REPLACED.								
3421	117NC	BOLKMS				HORIZON	FAILED		12/4/97
TI1R	7509	BK117C1				4021541671	COCKPIT		98ZZZX366
	INOPERABLE FOR P/R CSAS SYSTEM. REMOVED AND REPLACED.								
6710	117NC	BOLKMS				BRACKET	BROKEN	393	11/25/97
TI1R	7509	BK117C1				1174123101	CYLIC		98ZZZX328
	BRACKET WELDS BROKE. REMOVED AND REPLACED.								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - ENGINES

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
7323	566CA	BEECH	PWA		BENDIX	GOVERNOR	FAILED		1/9/98
	LJ184	65A90	PT6A20			25241673	ENGINE	3600	98ZZZX317
	POWER TURBINE GOVERNOR FLYWEIGHTS AND BUSHING FAILED CAUSING GOVERNOR TO DUMP PY AIR TO FUEL CONTROL UNIT ALLOWING POWER TO DROP TO 50 PERCENT. ENGINE WAS FEATHERED AND RETURNED TO HOME BASE WHERE GOVERNOR WAS REPLACED WITH OVERHAULED UNIT AND CHECKED OPERATION AND FLIGHT TEST.								
7323	9907K	BELL	ALLSN			GOVERNOR	FAILED		1/6/98
LS1R	2040	206B	250C20			252466712	ENGINE PT	1576	98ZZZX323
	GOVERNOR SLOW TO RESPOND TO POWER CHANGES (HIGH AND LOW SIDE).								
7323	206MH	BELL	ALLSN			GOVERNOR	FAILED	236	12/1/97
TI1R	45426	206L	250C28B		23004545	23004836	ENGINE		98ZZZX330
	GOVERNOR REMOVED FOR TORQUE SPIKES WITH POWER CHANGES. COMPONENT OF ENGINE 23004545, S/N CAE890566. REMOVED AND REPLACED.								
7532	721SP	BELL	ALLSN			BLEED VALVE	FAILED	618	11/17/97
TI1R	45486	206L	250C30			23005366	ENGINE		98ZZZX336
	ENGINE HAD COMPRESSOR STALL AT LOW POWER. REMOVED AND REPLACED BLEED VALVE.								
8530	6822U	CESSNA	CONT			SPRING SEAT	BROKEN		1/16/98
	414A0808	414A	TSIO520NB				ENG EXH VALVE		98ZZZX357
	REMOVED ROCKER COVER TO INSPECT FOR AD APPLICABILITY AND FOUND PARTICLES OF SPRING SEAT LAYING IN BOTTOM OF ROCKER COVER. DISASSEMBLED EXHAUST VALVE SPRING. FOUND SEAT BROKEN AROUND INNER RADIUS. SUBMITTER STATED EXHAUST VALVE GUIDE APPEARED TO BE .0625 INCH FARTHER OUT OF HEAD THAN REQUIRED. APPEARED AS IF VALVE GUIDE HAD WORKED LOOSE IN HEAD.								
8530	31754	PIPER	LYC			CYLINDER	CRACKED	1546	1/6/98
	287890478	PA28181	O360A4M			LW12427	NR 4		98ZZZX348
	PILOT EXPERIENCED ROUGH ENGINE OPERATION AND RETURNED TO AIRPORT WITH UNEVENTFUL LANDING. INSPECTION BY MAINTENANCE PERSONNEL DISCOVERED NR 4 CYLINDER HAD ZERO COMPRESSION. CYLINDER WAS REMOVED AND FORWARDED TO ENGINE OVERHAUL SHOP WHERE FURTHER INSPECTION REVEALED CYLINDER WAS CRACKED APPROXIMATELY HALF WAY AROUND CIRCUMFERENCE BETWEEN CYLINDER BORE TO HEAD THREAD. NO HISTORY OF OPERATIONAL PROBLEMS WITH EITHER THIS CYLINDER OR OTHERS MOUNTED TO THIS ENGINE.								
8520	9504K	UNIVAR	FRNKLN			CRANKSHAFT	CRACKED	406	12/2/97
	1082504	1082	6A4165B3			18486	PROP FLANGE		98ZZZX313
	INSPECTION FOUND CRANKSHAFT PROPELLER FLANGE CRACKED BETWEEN HOLES IN TWO PLACES.								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - ENGINES)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
3453	206MH	BELL				LORAN	CRACKED		12/4/97
TI1R	45426	206L			KLN89	066011481111	FACEPLATE		98ZZZX329
	LORAN FACE PLATE DISPLAY CRACKED. REMOVED AND REPLACED.								
2312	495LF	BOLKMS				TRANSCEIVER	MALFUNCTION		12/4/97
TI1R	S645	BO105S			KY196	064101900	COCKPIT		98ZZZX334
	UNABLE TO AJDUST SIDE TONE/MIC GAIN DOWN TO A SUITABLE LEVEL TO MATCH OUTPUT OF OTHER AVIONICS EQUIPMENT. REMOVED AND REPLACED.								
3425	117LU	BOLKMS				INDICATOR	FAILED		12/21/97
TI1R	7144	BK117B1				5204210002	HSI		98ZZZX365
	HSI INDICATOR ROTATES CLOCKWISE. REMOVED AND REPLACED.								
3453	460H	BOLKMS				LORAN	FAILED		11/10/97
TI1R	7142	BK117B1			612B	4309805000	COCKPIT		98ZZZX333
	LORAN HEADINGS AND MILEAGE INCORRECT. RE: RMA 652062. REMOVED AND REPLACED.								
3120	317MC	BOLKMS				CLOCK	FAILED		11/19/97
TI1R	7505	BK117C1				JB15307	COCKPIT		98ZZZX368
	CLOCK LOSES TIME, RUNS SLOW. REMOVED AND REPLACED.								
3421	117NC	BOLKMS				HORIZON	FAILED		12/4/97
TI1R	7509	BK117C1				4021541671	COCKPIT		98ZZZX366
	INOPERABLE FOR P/R CSAS SYSTEM. REMOVED AND REPLACED.								
6122	3878T	PIPER			HARTZL	DRIVE GEAR	DEFECTIVE	3940	1/6/98
LU4R	28R30203	PA28R180			F27A	C4191	PROPELLER GOV		98ZZZX361
	GOVERNOR DRIVE GEAR HAS SHARP INDICATION AT BASE OF TOOTH EXTENDING AROUND CORNER.								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS)

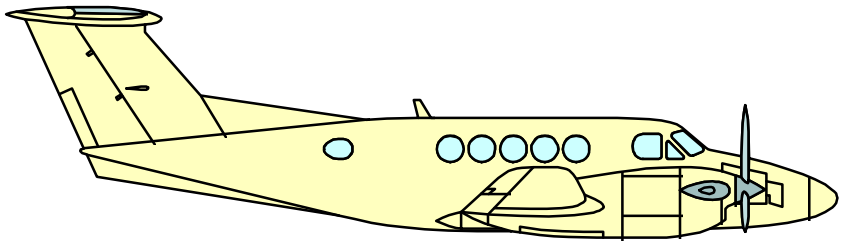
DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
6110	9EF	PIPER		HARTZL		BEARING	CRACKED	2592	1/5/98
LU4R	277305092	PA23250		HCE2YR2			PROP ASSY		98ZZZX364
	INSPECTION FOUND PROPELLER ASSY BEARING CRACKED.								
6110	4414K	TMPSON		HARTZL		GUIDE COLLAR	CRACKED	1646	1/6/98
LU4R	NAV41414	NAVION*		HCA2X204		C2222	PROPELLER		98ZZZX360
	PROPELLER COLLAR GUIDE PARTS HAD CRACKS EXTENDING UP TO 1.5 INCHES ORIGINATING AT THREADED HOLE AND EXTENDING AROUND CORNERS. PROPELLER HAD NOT BEEN REMOVED FROM AIRCRAFT SINCE INSTALLED IN MARCH, 1973.								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS)

INTERNATIONAL

SERVICE DIFFICULTY REPORT



INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO

(There was no data for this report.)

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT)

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
8500		HUGHES	LYC			ENGINE	FAILED		11/7/97
		269C	HO360*				POWER PLANT		AU971471

(AUS) ENGINE SUFFERED A POWER LOSS FOLLOWED BY A STOPPAGE. AIRCRAFT CRASHED.

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS)

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - ENGINES

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
7414		BEECH	LYC		BENDIX	SPRING	BROKEN		12/3/97
		76	O360A1G		IO382754	IO51324	RT ENG MAG	1414	AU971522
	(AUS) RH ENGINE MAGNETO IMPULSE COUPLING SPRING BROKEN.								
8500		HUGHES	LYC			ENGINE	FAILED		11/7/97
		269C	HO360*				POWER PLANT		AU971471
	(AUS) ENGINE SUFFERED A POWER LOSS FOLLOWED BY A STOPPAGE. AIRCRAFT CRASHED.								

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - ENGINES)

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO

(There was no data for this report.)

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS)

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
6111		BEECH	PWA	MCAULY		BLADE	FOD		10/21/97
		B200C	PT6A42	3GFR34C701			LT PROP TIP		AU971439
	(AUS) LH PROPELLER BLADE TIP BENT. BLOOD ON THE BLADE LEADS TO THE ASSUMPTION OF AND ANIMAL STRIKE.								
6114		PIPER	LYC	HARTZL		HUB	CRACKED		12/10/97
		PA36300	IO540K1G5	HCC2YK1		22117	PROP HUB		AU971571
	(AUS) PROPELLER HUB WAS PREVIOUSLY INSPECTED AT THE 50HR INTERVAL IAW HARTZELL SB164C AND FOUND SATISFACTORY. WHEN INSPECTED AT THE 100 HOURLY, A PARTICULARLY LARGE CRACK WAS FOUND IN THE REAR HALF OF THE RADIUS AT THE BLADE ROOT.								

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS)

U.S. Department
of Transportation
Federal Aviation Administration

SERVICE DIFFICULTY REPORT SUMMARY

GENERAL AVIATION - INDEX

The following information provides a tally of the Service Difficulty Reports (SDR's) contained in this weeks issue of the General Aviation SDR Summary. The totals represent only a summation of the SDR's that were submitted to the FAA, Aviation Data Systems Branch, AFS-620, and processed in time for inclusion in the Summary. The first table is a tally of the number of SDR's submitted through the indicated Flight Standards District Office (FSDO). The second table sorts the SDR's by the aircraft or equipment make and model. The heading at the top of each table provides a two digit Joint Aircraft System/Component (JASC) code grouping (e.g., JASC codes 1100 thru 1800 are represented by the heading labeled 11-18) which categorizes in general, the problem areas for each reported discrepancy.

The Flight Standards Service Difficulty Program objective is to achieve prompt and appropriate correction of conditions adversely affecting continued airworthiness of aeronautical products. This is accomplished by the collection of Service Difficulty and Malfunction or Defect Reports. SDR's are consolidation and collation into common data base where they are analyzed for trends, problems, and alert information. This information is then disseminated to the appropriate segments of the aviation community and to other FAA offices.

The number of SDR's submitted is not an indicator of the mechanical reliability or fitness of an air carrier's aircraft fleet and should not be used as such. The air carriers certificate holding office has the primary responsibility for planning, programming evaluations, and assessing the performance of operators. Questions regarding an air carrier's fleet performance should be directed to the appropriate Flight Standards District Office, Certificate Management Office, or Certificate Management Unit.

GENERAL AVIATION SUMMARY INDEX BY DISTRICT OFFICE

1/25/98 To 1/31/98 ISSUE: 98-05 ZAC-327

DISTRICT OFFICE	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								
	11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
AL 03	0	0	0	0	1	0	0	0	1
AU S	0	0	0	0	0	2	1	1	4
CE 01	0	0	0	0	0	0	1	0	1
EA 09	0	0	0	0	0	0	1	0	1
EA 11	0	0	0	0	0	0	0	1	1
EA 13	0	0	0	0	0	0	1	0	1
EA 23	0	0	0	0	1	0	0	0	1
EA 27	0	0	1	0	0	0	0	0	1
GL 11	0	0	1	0	0	0	0	0	1
GL 15	0	0	0	0	0	0	0	1	1
NE 05	0	0	0	0	0	0	0	1	1
NM 11	0	3	0	0	2	0	0	0	5
SO 13	0	0	1	0	0	0	0	0	1
SO 15	0	0	1	0	0	0	0	0	1
SO 16	0	0	1	0	0	0	0	0	1
SO 17	0	0	0	0	0	3	0	0	3
SW 05	0	1	9	0	1	1	2	0	14
SW 11	0	0	0	0	1	0	0	1	2
WP 07	0	0	2	0	1	0	0	0	3
TOTALS	**0**	**4**	**16**	**0**	**7**	**6**	**6**	**5**	**44**

(End of GENERAL AVIATION SUMMARY INDEX by DISTRICT OFFICE Report)

GENERAL AVIATION SUMMARY INDEX by MANUFACTURER MAKE and MODEL

1/25/98 To 1/31/98 ISSUE: 98-05 ZAC-327

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								
		11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
BEECH	65A90	0	0	0	0	0	0	1	0	1
BEECH	76	0	0	0	0	0	0	1	0	1
BEECH	A36	0	0	1	0	0	0	0	0	1
BEECH	B200C	0	0	0	0	0	1	0	0	1
BEECH	E90	0	0	2	0	0	0	0	0	2
BELL	206B	0	0	0	0	0	0	1	0	1
BELL	206L	0	0	2	0	0	0	2	0	4
BELL	222U	0	0	0	0	1	0	0	0	1
BOLKMS	BK117A3	0	0	1	0	0	0	0	0	1
BOLKMS	BK117B1	0	0	2	0	0	0	0	0	2
BOLKMS	BK117C1	0	0	4	0	0	1	0	0	5
BOLKMS	BO105S	0	1	0	0	0	0	0	0	1
CESSNA	172R	0	0	1	0	0	0	0	0	1
CESSNA	180	0	0	0	0	1	0	0	0	1
CESSNA	340A	0	0	1	0	0	0	0	0	1
CESSNA	402B	0	0	0	0	1	0	0	1	2
CESSNA	414A	0	0	0	0	0	0	0	1	1
CESSNA	A185F	0	3	0	0	0	0	0	0	3
CESSNA	T210M	0	0	0	0	1	0	0	0	1
CESSNA	T210N	0	0	1	0	0	0	0	0	1
GULSTM	560	0	0	0	0	0	0	1	0	1
HUGHES	269C	0	0	0	0	0	0	0	1	1
LUSCOM	8A	0	0	0	0	1	0	0	0	1
LUSCOM	8F	0	0	0	0	1	0	0	0	1
PIPER	PA23250	0	0	0	0	0	1	0	0	1
PIPER	PA25	0	0	0	0	1	0	0	0	1
PIPER	PA28181	0	0	0	0	0	0	0	1	1

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER 11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
PIPER	PA28R180	0	0	0	0	0	1	0	0	1
PIPER	PA31T1	0	0	1	0	0	0	0	0	1
PIPER	PA36300	0	0	0	0	0	1	0	0	1
TMPSON	NAVION*	0	0	0	0	0	1	0	0	1
UNIVAR	1082	0	0	0	0	0	0	0	1	1
TOTALS		**0**	**4**	**16**	**0**	**7**	**6**	**6**	**5**	**44**

(End of AIR CARRIER SUMMARY INDEX by OPERATOR Report)

JOINT AIRCRAFT SYSTEM/COMPONENT CODE TABLE

PREFACE

The Joint Aircraft System/Component (JASC) Code Table is a modified version of the Air Transport Association of America (ATA), Specification 100 code. It was developed by the Federal Aviation Administration's (FAA), Aviation Data Systems Branch (AFS-620). Technical support was provided by the Galaxy Scientific Corporation, and various representatives of the air carrier and general aviation community.

Over the past four years, the JASC format of the ATA Spec 100 code has gained widespread industry acceptance. In a harmonized effort, the FAA's counterparts in Australia and Canada have adopted the JASC code with only a few exceptions. Some Canadian aircraft manufacturers have also recently adopted this new stardard.

This code table is constructed by using the new JASC four (4) digit code, along with an abbreviated code title. The abbreviated titles have been modified in some cases to clarify the intended use of the accompanying code. This table can be used as a quick reference chart, to assist in the coding and review of aircraft structures or systems data (i.e., Service Difficulty Report (SDR), Accident/Incident Report).

The current coding scheme used in the JASC code was introduced in May 1991, for the technical classification of SDR's. Its predecessor, the FAA aircraft system/component code, was a similar but more complex eight-digit code which was developed over 25 years ago. It was constructed around the computer technology of that period. It consisted of a four digit numerical code plus a four alpha character code to make data retrieval possible. Since that time, computer technology has advanced many fold. Reducing the code from eight to four characters simplifies coding, and in some cases, makes JASC coding match the ATA Specification 100 first three digits, which are used to identify aircraft systems. The ATA code does not reference the fourth digit, so it is free to be used for identifying components.

The JASC code aircraft structural section has increased due to problems inherent with aging aircraft. As an example, FAA code 5301 SXBD was expanded to 20 items due to the high rate of reporting in this area (8021 structural reports were received in 1989). In some instances, there was very little reporting and codes were combined into other systems if the safety impact was not significant. The overall reduction in codes has been from 568 FAA codes to 488 JASC codes, with the significant increase being in the structural area as stated earlier.

The JASC code divides the engine section into two major code groups to separate the turbine and reciprocating engines. The codes for the turbine engines are in JASC Chapter 72, Turbine/Turboprop Engine. The codes for the reciprocating engines are now exclusively found in JASC Chapter 85, Reciprocating Engine.

The other major deviation from ATA Spec 100 is in ATA section 2730, specifically involves the stall warning system. Early technology (primarily on smaller aircraft) directly linked the sensing of flight attitude to one of the components which furnished the means of manually controlling the flight attitude characteristics (elevator). Today, most large transport category aircraft utilize electronic units to sense the change in the environmental condition called stall, and use the data to influence navigation. ATA section 3410, Flight Environment Data, includes high speed warning in its code definition. Stall warning (low speed) is the reciprocal term of high speed warning, so its filing under the same code appears more logical. Thus, with the JASC code it was decided to move the stall warning system to Chapter 34 under the separate code JASC code 3418, Stall Warning System.

The FAA is continuing to pursue worldwide involvement from operators and manufacturers in addressing the need for international standardization of aircraft system/component codes. The ultimate goal is to develop a universal aircraft/component numbering standard which can be used in the manufacturer's maintenance manual, wiring diagram manual, system manuals and illustrated parts catalog. This harmonized standard must be a usable standard for the aircraft manufacturers, air carrier operators and the general aviation community.

We welcome comments and feedback regarding the possible forming of working groups to achieve this long range consideration of possibly harmonizing the ATA Specification 100 code and the JASC code. Comments may be directed to the FAA, Aviation Data Sytem Branch, AFS-620, P.O. Box 25082, Oklahoma City, OK 73125.

JOINT AIRCRAFT SYSTEM/COMPONENT CODE TABLE

JASC/ TITLE

11 PLACARDS AND MARKINGS

1100 PLACARDS AND MARKINGS

12 SERVICING

1210 FUEL SERVICING
1220 OIL SERVICING
1230 HYDRAULIC FLUID SERVICING
1240 COOLANT SERVICING

18 HELICOPTER VIBRATION

1800 HELICOPTER VIB/NOISE ANALYSIS
1810 HELICOPTER VIBRATION ANALYSIS
1820 HELICOPTER NOISE ANALYSIS

21 AIR CONDITIONING

2100 AIR CONDITIONING SYSTEM
2110 CABIN COMPRESSOR SYSTEM
2120 AIR DISTRIBUTION SYSTEM
2121 AIR DISTRIBUTION FAN
2130 CABIN PRESSURE CONTROL SYSTEM
2131 CABIN PRESSURE CONTROLLER
2132 CABIN PRESSURE INDICATOR
2133 PRESSURE REGUL/OUTFLOW VALVE
2134 CABIN PRESSURE SENSOR
2140 HEATING SYSTEM
2150 CABIN COOLING SYSTEM
2160 CABIN TEMPERATURE CONTROL SYSTEM
2161 CABIN TEMPERATURE CONTROLLER
2162 CABIN TEMPERATURE INDICATOR
2163 CABIN TEMPERATURE SENSOR
2170 HUMIDITY CONTROL SYSTEM

22 AUTO FLIGHT

2200 AUTO FLIGHT SYSTEM
2210 AUTOPILOT SYSTEM
2211 AUTOPILOT COMPUTER
2212 ALTITUDE CONTROLLER
2213 FLIGHT CONTROLLER
2214 AUTOPILOT TRIM INDICATOR
2215 AUTOPILOT MAIN SERVO
2216 AUTOPILOT TRIM SERVO
2220 SPEED-ATTITUDE CORRECT. SYSTEM
2230 AUTO THROTTLE SYSTEM
2250 AERODYNAMIC LOAD ALLEVIATING

23 COMMUNICATIONS

2300 COMMUNICATIONS SYSTEM
2310 HF COMMUNICATION SYSTEM
2311 UHF COMMUNICATION SYSTEM
2312 VHF COMMUNICATION SYSTEM
2320 DATA TRANSMISSION AUTO CALL
2330 ENTERTAINMENT SYSTEM
2340 INTERPHONE & PA SYSTEM
2350 AUDIO INTEGRATING SYSTEM
2360 STATIC DISCHARGE SYSTEM
2370 AUDIO/VIDEO MONITORING

24 ELECTRICAL POWER

2400 ELECTRICAL POWER SYSTEM
2410 ALTERNATOR-GENERATOR DRIVE
2420 AC GENERATION SYSTEM
2421 AC GENERATOR-ALTERNATOR
2422 AC INVERTER
2423 PHASE ADAPTER

24 ELECTRICAL POWER CONT'D

2424 AC REGULATOR
2425 AC INDICATING SYSTEM
2430 DC GENERATING SYSTEM
2431 BATTERY OVERHEAT WARN. SYSTEM
2432 BATTERY/CHARGER SYSTEM
2433 DC RECTIFIER-CONVERTER
2434 DC GENERATOR-ALTERNATOR
2435 STARTER-GENERATOR
2436 DC REGULATOR
2437 DC INDICATING SYSTEM
2440 EXTERNAL POWER SYSTEM
2450 AC POWER DISTRIBUTION SYSTEM
2460 DC POWER/DISTRIBUTION SYSTEM

25 EQUIPMENT/FURNISHINGS

2500 CABIN EQUIPMENT/FURNISHINGS
2510 FLIGHT COMPARTMENT EQUIPMENT
2520 PASSENGER COMPARTMENT EQUIPMENT
2530 BUFFET/GALLEYS
2540 LAVATORIES
2550 CARGO COMPARTMENTS
2551 AGRICULTURAL SPRAY SYSTEM
2560 EMERGENCY EQUIPMENT
2561 LIFE JACKET
2562 EMERGENCY LOCATOR BEACON
2563 PARACHUTE
2564 LIFE RAFT
2565 ESCAPE SLIDE
2570 ACCESSORY COMPARTMENT
2571 BATTERY BOX STRUCTURE
2572 ELECTRONIC SHELF SECTION

26 FIRE PROTECTION

2600 FIRE PROTECTION SYSTEM
2610 DETECTION SYSTEM
2611 SMOKE DETECTION
2612 FIRE DETECTION
2613 OVERHEAT DETECTION
2620 EXTINGUISHING SYSTEM
2621 FIRE BOTTLE, FIXED
2622 FIRE BOTTLE, PORTABLE

27 FLIGHT CONTROLS

2700 FLIGHT CONTROL SYSTEM
2701 CONTROL COLUMN SECTION
2710 AILERON CONTROL SYSTEM
2711 AILERON TAB CONTROL SYSTEM
2720 RUDDER CONTROL SYSTEM
2721 RUDDER TAB CONTROL SYSTEM
2722 RUDDER ACTUATOR
2730 ELEVATOR CONTROL SYSTEM
2731 ELEVATOR TAB CONTROL SYSTEM
2740 STABILIZER CONTROL SYSTEM
2741 STABILIZER POSITION INDICATING
2742 STABILIZER ACTUATOR
2750 TE FLAP CONTROL SYSTEM
2751 TE FLAP POSITION IND. SYSTEM
2752 TE FLAP ACTUATOR
2760 DRAG CONTROL SYSTEM
2761 DRAG CONTROL ACTUATOR
2770 GUST LOCK/DAMPER SYSTEM
2780 LE FLAP CONTROL SYSTEM
2781 LE FLAP POSITION IND. SYSTEM
2782 LE FLAP ACTUATOR

28 FUEL

2800 AIRCRAFT FUEL SYSTEM
2810 FUEL STORAGE
2820 ACFT FUEL DISTRIB. SYSTEM
2821 ACFT FUEL FILTER/STRAINER
2822 FUEL BOOST PUMP
2823 FUEL SELECTOR/SHUTOFF VALVE
2824 FUEL TRANSFER VALVE
2830 FUEL DUMP SYSTEM
2840 ACFT FUEL INDICATING
2841 FUEL QUANTITY INDICATOR
2842 FUEL QUANTITY SENSOR
2843 FUEL TEMPERATURE INDICATING
2844 FUEL PRESSURE INDICATOR

29 HYDRAULIC POWER

2900 HYDRAULIC POWER SYSTEM
2910 HYDRAULIC, MAIN SYSTEM
2911 HYDRAULIC POWER-ACCUMULATOR-MAIN
2912 HYDRAULIC FILTER-MAIN SYSTEM
2913 HYDRAULIC PUMP. ELECT-ENG.-MAIN
2914 HYDRAULIC HANDPUMP-MAIN
2915 HYDRAULIC PRESSURE RELIEF VLV-MAIN
2916 HYDRAULIC RESERVOIR-MAIN
2917 HYDRAULIC PRESSURE REGULATOR-MAIN
2920 HYDRAULIC, AUXILIARY SYSTEM
2921 HYDRAULIC ACCUMULATOR-AUXILIARY
2922 HYDRAULIC FILTER-AUXILIARY
2923 HYDRAULIC PUMP-AUXILIARY
2925 HYDRAULIC PRESSURE RELIEF-AUXILIARY
2926 HYDRAULIC RESERVOIR-AUXILIARY
2927 HYDRAULIC PRESSURE REGULATOR-AUX.
2930 HYDRAULIC SYSTEM INDICATING
2931 HYDRAULIC PRESSURE INDICATOR
2932 HYDRAULIC PRESSURE SENSOR
2933 HYDRAULIC QUANTITY INDICATOR
2934 HYDRAULIC QUANTITY SENSOR

30 ICE AND RAIN PROTECTION

3000 ICE/RAIN PROTECTION SYSTEM
3010 AIRFOIL ANTI/DE-ICE SYSTEM
3020 AIR INTAKE ANTI/DE-ICE SYSTEM
3030 PITOT/STATIC ANTI-ICE SYSTEM
3040 WINDSHIELD/DOOR RAIN/ICE REMOVAL
3050 ANTENNA/RADOME ANTI-ICE/DE-ICE SYSTEM
3060 PROP/ROTOR ANTI-ICE/DE-ICE SYSTEM
3070 WATER LINE ANTI-ICE SYSTEM
3080 ICE DETECTION

31 INSTRUMENTS

3100 INDICATING/RECORDING SYSTEM
3110 INSTRUMENT PANEL
3120 INDEPENDENT INSTRUMENTS (CLOCK, ETC.)
3130 DATA RECORDERS (FLT/MAINT)
3140 CENTRAL COMPUTERS (EICAS)
3150 CENTRAL WARNING
3160 CENTRAL DISPLAY
3170 AUTOMATIC DATA

32 LANDING GEAR

3200 LANDING GEAR SYSTEM
3201 LANDING GEAR/WHEEL FAIRING
3210 MAIN LANDING GEAR
3211 MAIN LANDING GEAR ATTACH SECTION
3212 EMERGENCY FLOTATION SECTION
3213 MAIN LANDING GEAR STRUT/AXLE/TRUCK
3220 NOSE/TAIL LANDING GEAR
3221 NOSE/TAIL LANDING GEAR ATTACH SECTION
3222 NOSE/TAIL LANDING GEAR STRUT/AXLE
3230 LANDING GEAR RETRACT/EXT. SYSTEM
3231 LANDING GEAR DOOR RETRACT SECTION
3232 LANDING GEAR DOOR ACTUATOR
3233 LANDING GEAR ACTUATOR
3234 LANDING GEAR SELECTOR
3240 LANDING GEAR BRAKE SYSTEM
3241 BRAKE ANTI-SKID SECTION
3242 BRAKE
3243 MASTER CYL/BRAKE VALVE
3244 TIRE
3245 TIRE TUBE
3246 WHEEL/SKI/FLOAT
3250 LANDING GEAR STEERING SYSTEM
3251 STEERING UNIT
3252 SHIMMY DAMPER
3260 LANDING GEAR POSITION & WARNING
3270 AUXILIARY GEAR (TAIL SKID)

33 LIGHTS

3300 LIGHTING SYSTEM
3310 FLIGHT COMPARTMENT LIGHTING
3320 PASSENGER COMPARTMENT LIGHTING
3330 CARGO COMPARTMENT LIGHTING
3340 EXTERIOR LIGHTING
3350 EMERGENCY LIGHTING

34 NAVIGATION

3400 NAVIGATION SYSTEM
3410 FLIGHT ENVIRONMENT DATA
3411 PITOT/STATIC SYSTEM
3412 OUTSIDE AIR TEMP. IND./SENSOR
3413 RATE OF CLIMB INDICATOR
3414 AIRSPEED/MACH INDICATING
3415 HIGH SPEED WARNING
3416 ALTIMETER, BAROMETRIC/ENCODER

34 NAVIGATION CONT'D

3417 AIR DATA COMPUTER
3418 STALL WARNING SYSTEM
3420 ATTITUDE AND DIRECTION DATA SYSTEM
3421 ATTITUDE GYRO & IND. SYSTEM
3422 DIRECTIONAL GYRO & IND. SYSTEM
3423 MAGNETIC COMPASS
3424 TURN & BANK/RATE OF TURN INDICATOR
3425 INTEGRATED FLT. DIRECTOR SYSTEM
3430 LANDING & TAXI AIDS
3431 LOCALIZER/VOR SYSTEM
3432 GLIDE SLOPE SYSTEM
3433 MICROWAVE LANDING SYSTEM
3434 MARKER BEACON SYSTEM
3435 HEADS UP DISPLAY SYSTEM
3436 WIND SHEAR DETECTION SYSTEM
3440 INDEPENDENT POS. DETERMINING SYSTEM
3441 INERTIAL GUIDANCE SYSTEM
3442 WEATHER RADAR SYSTEM
3443 DOPPLER SYSTEM
3444 GROUND PROXIMITY SYSTEM
3445 AIR COLLISION AVOIDANCE SYSTEM (TCAS)
3446 NON RADAR WEATHER SYSTEM
3450 DEPENDENT POSITION DETERMINING SYSTEM
3451 DME/TACAN SYSTEM
3452 ATC TRANSPONDER SYSTEM
3453 LORAN SYSTEM
3454 VOR SYSTEM
3455 ADF SYSTEM
3456 OMEGA NAVIGATION SYSTEM
3457 GLOBAL POSITIONING SYSTEM
3460 FLIGHT MANAGE. COMPUTING SYSTEM

35 OXYGEN

3500 OXYGEN SYSTEM
3510 CREW OXYGEN SYSTEM
3520 PASSENGER OXYGEN SYSTEM
3530 PORTABLE OXYGEN SYSTEM

36 PNEUMATIC

3600 PNEUMATIC SYSTEM
3610 PNEUMATIC DISTRIBUTION SYSTEM
3620 PNEUMATIC INDICATING SYSTEM

37 VACUUM

3700 VACUUM SYSTEM
3710 VACUUM DISTRIBUTION SYSTEM
3720 VACUUM INDICATING SYSTEM

38 WATER/WASTE

3800 WATER & WASTE SYSTEM
3810 POTABLE WATER SYSTEM
3820 WASH WATER SYSTEM
3830 WASTE DISPOSAL SYSTEM
3840 AIR SUPPLY (WATER PRESS. SYSTEM)

45 CENTRAL MAINT. SYSTEM

4500 CENTRAL MAINT. COMPUTER

49 AIRBORNE AUXILIARY POWER

4900 AIRBORNE APU SYSTEM
4910 APU COWLING/CONTAINMENT
4920 APU CORE ENGINE
4930 APU ENGINE FUEL & CONTROL
4940 APU START/IGNITION SYSTEM
4950 APU BLEED AIR SYSTEM
4960 APU CONTROLS
4970 APU INDICATING SYSTEM
4980 APU EXHAUST SYSTEM
4990 APU OIL SYSTEM

51 STANDARD PRACTICES/STRUCTURES

5100 STANDARD PRACTICES/STRUCTURES
5101 AIRCRAFT STRUCTURES
5102 BALLOON REPORTS

52 DOORS

5200 DOORS
5210 PASSENGER/CREW DOORS
5220 EMERGENCY EXIT
5230 CARGO/BAGGAGE DOORS
5240 SERVICE DOORS
5241 GALLEY DOORS
5242 E/E COMPARTMENT DOORS
5243 HYDRAULIC COMPARTMENT DOORS
5244 ACCESSORY COMPARTMENT DOORS
5245 AIR CONDITIONING COMPART. DOORS
5246 FLUID SERVICE DOORS
5247 APU DOORS
5248 TAIL CONE DOORS
5250 FIXED INNER DOORS
5260 ENTRANCE STAIRS
5270 DOOR WARNING SYSTEM
5280 LANDING GEAR DOORS

53 FUSELAGE

5300 FUSELAGE STRUCTURE (GENERAL)
5301 AERIAL TOW EQUIPMENT
5302 ROTORCRAFT TAIL BOOM
5310 FUSELAGE MAIN STRUCTURE
5311 FUSELAGE MAIN FRAME
5312 FUSELAGE MAIN BULKHEAD
5313 FUSELAGE MAIN LONGERON/STRINGER
5314 FUSELAGE MAIN KEEL
5315 FUSELAGE MAIN FLOOR BEAM
5320 FUSELAGE MISCELLANEOUS STRUCTURE
5321 FUSELAGE FLOOR PANEL
5322 FUSELAGE INTERNAL MOUNT STRUCTURE
5323 FUSELAGE INTERNAL STAIRS
5324 FUSELAGE FIXED PARTITIONS
5330 FUSELAGE MAIN PLATE/SKIN
5340 FUSELAGE MAIN ATTACH FITTINGS
5341 WING ATTACH FITTINGS (ON FUSELAGE)
5342 STABILIZER ATTACH FITTINGS
5343 LANDING GEAR ATTACH FITTINGS
5344 FUSELAGE DOOR HINGES
5345 FUSELAGE EQUIPMENT ATTACH FITTINGS
5346 POWERPLANT ATTACH FITTINGS
5347 SEAT/CARGO ATTACH FITTINGS
5350 FUSELAGE AERODYNAMIC FAIRINGS

54 NACELLES/PYLONS

5400 NACELLE/PYLON STRUCTURE
5410 MAIN FRAME (ON NACELLE/PYLON)
5411 FRAME/SPAR/RIB(NACELLE/PYLON)
5412 BULKHEAD/FIREWALL (NAC/PYLON)
5413 LONGERON/STRINGER (NAC/PYLON)
5414 PLATE SKIN (NAC/PYLONS)
5415 ATTACH FITTINGS (NAC/PYLON)

55 STABILIZERS

5500 EMPENNAGE STRUCTURE
5510 HORIZONTAL STABILIZER STRUCTURE
5511 HORIZONTAL STABILIZER SPAR/RIB
5512 HORIZONTAL STABILIZER PLATE/SKIN
5513 HORIZONTAL STABILIZER TAB STRUCTURE
5520 ELEVATOR STRUCTURE

55 STABILIZERS CONT'D

5521 ELEVATOR SPAR/RIB STRUCTURE
5522 ELEVATOR PLATES/SKIN STRUCTURE
5523 ELEVATOR TAB STRUCTURE
5530 VERTICAL STABILIZER STRUCTURE
5531 VERTICAL STABILIZER SPAR/RIB STRUCTURE
5532 VERTICAL STABILIZER PLATES/SKIN
5533 VENTRAL STRUCTURE (ON VERT. STAB)
5540 RUDDER STRUCTURE
5541 RUDDER SPAR/RIB STRUCTURE
5542 RUDDER PLATE/SKIN STRUCTURE
5543 RUDDER TAB STRUCTURE
5550 EMPENNAGE FLT. CONT. ATTACH FITTING
5551 HORIZONTAL STABILIZER ATTACH FITTING
5552 ELEVATOR/TAB ATTACH FITTINGS
5553 VERT. STAB. ATTACH FITTINGS
5554 RUDDER/TAB ATTACH FITTINGS

56 WINDOWS

5600 WINDOW/WINDSHIELD SYSTEM
5610 FLIGHT COMPARTMENT WINDOWS
5620 PASSENGER COMPARTMENT WINDOWS
5630 DOOR WINDOWS
5640 INSPECTION WINDOWS

57 WINGS

5700 WING STRUCTURE
5710 WING MAIN FRAME STRUCTURE
5711 WING SPAR STRUCTURE
5712 WING RIB STRUCTURE
5713 WING LONGERON/STRINGER
5714 WING CENTER BOX
5720 WING MISCELLANEOUS STRUCTURE
5730 WING PLATES/SKINS
5740 WING ATTACH FITTINGS
5741 WING, FUSELAGE ATTACH FITTINGS
5742 WING, NAC/PYLON ATTACH FITTINGS
5743 WING, LANDING GEAR ATTACH FITTINGS
5744 CONTROL SURFACE ATTACH FITTINGS
5750 WING CONTROL SURFACE STRUCTURE
5751 AILERON STRUCTURE
5752 AILERON TAB STRUCTURE
5753 TE FLAP STRUCTURE
5754 LEADING EDGE DEVICE STRUCTURE
5755 SPOILER STRUCTURE

61 PROPELLERS/PROPULSORS

6100 PROPELLER SYSTEM
6110 PROPELLER ASSEMBLY
6111 PROPELLER BLADE SECTION
6112 PROPELLER DE-ICE BOOT SECTION
6113 PROPELLER SPINNER SECTION
6114 PROPELLER HUB SECTION
6120 PROPELLER CONTROL SYSTEM
6121 PROPELLER SYNCHRONIZER SECTION
6122 PROPELLER GOVERNOR
6123 PROPELLER FEATHERING/REVERSING
6130 PROPELLER BRAKING
6140 PROPELLER INDICATING SYSTEM

62 MAIN ROTOR

6200 MAIN ROTOR SYSTEM
6210 MAIN ROTOR BLADES
6220 MAIN ROTOR HEAD
6230 MAIN ROTOR MAST/SWASHPLATE
6240 MAIN ROTOR INDICATING SYSTEM

63 MAIN ROTOR DRIVE

6300 MAIN ROTOR DRIVE SYSTEM
6310 ENGINE/TRANSMISSION COUPLING
6320 MAIN ROTOR GEARBOX
6321 MAIN ROTOR BRAKE
6322 ROTORCRAFT COOLING FAN SYSTEM
6330 MAIN ROTOR TRANSMISSION MOUNT
6340 ROTOR DRIVE INDICATING SYSTEM

64 TAIL ROTOR

6400 TAIL ROTOR SYSTEM
6410 TAIL ROTOR BLADE
6420 TAIL ROTOR HEAD
6440 TAIL ROTOR INDICATING SYSTEM

65 TAIL ROTOR DRIVE

6500 TAIL ROTOR DRIVE SYSTEM
6510 TAIL ROTOR DRIVE SHAFT
6520 TAIL ROTOR GEARBOX
6540 TAIL ROTOR DRIVE INDICATING SYSTEM

67 ROTORS FLIGHT CONTROL

6700 ROTORCRAFT FLIGHT CONTROL
6710 MAIN ROTOR CONTROL
6711 TILT ROTOR FLIGHT CONTROL
6720 TAIL ROTOR CONTROL SYSTEM
6730 ROTORCRAFT SERVO SYSTEM

71 POWERPLANT

7100 POWERPLANT SYSTEM
7110 ENGINE COWLING SYSTEM
7111 COWL FLAP SYSTEM
7112 ENGINE AIR BAFFLE SECTION
7120 ENGINE MOUNT SECTION
7130 ENGINE FIRESEALS
7160 ENGINE AIR INTAKE SYSTEM
7170 ENGINE DRAINS

72 TURBINE/TURBOPROP ENGINE

7200 ENGINE (TURBINE/TURBOPROP)
7210 TURBINE ENGINE REDUCTION GEAR
7220 TURBINE ENGINE AIR INLET SECTION
7230 TURBINE ENGINE COMPRESSOR SECTION
7240 TURBINE ENGINE COMBUSTION SECTION
7250 TURBINE SECTION
7260 TURBINE ENGINE ACCESSORY DRIVE
7261 TURBINE ENGINE OIL SYSTEM
7270 TURBINE ENGINE BYPASS SECTION

73 ENGINE FUEL & CONTROL

7300 ENGINE FUEL & CONTROL
7310 ENGINE FUEL DISTRIBUTION
7311 ENGINE FUEL-OIL COOLER
7312 FUEL HEATER
7313 FUEL INJECTOR NOZZLE
7314 ENGINE FUEL PUMP
7320 FUEL CONTROLLING SYSTEM
7321 FUEL CONTROL/ELECTRONIC
7322 FUEL CONTROL/CARBURETOR
7323 TURBINE GOVERNOR
7324 FUEL DIVIDER
7330 ENGINE FUEL INDICATING SYSTEM
7331 FUEL FLOW INDICATING
7332 FUEL PRESSURE INDICATING
7333 FUEL FLOW SENSOR
7334 FUEL PRESSURE SENSOR

74 IGNITION

7400 IGNITION SYSTEM
7410 IGNITION POWER SUPPLY
7411 LOW TENSION COIL
7412 EXCITER
7413 INDUCTION VIBRATOR
7414 MAGNETO/DISTRIBUTOR
7420 IGNITION HARNESS (DISTRIBUTION)
7421 SPARK PLUG/IGNITER
7430 IGNITION SWITCHING

75 AIR

7500 ENGINE BLEED AIR SYSTEM
7510 ENGINE ANTI-ICING SYSTEM
7520 ENGINE COOLING SYSTEM
7530 COMPRESSOR BLEED CONTROL
7531 COMPRESSOR BLEED GOVERNOR
7532 COMPRESSOR BLEED VALVE
7540 BLEED AIR INDICATING SYSTEM

76 ENGINE CONTROLS

7600 ENGINE CONTROLS
7601 ENGINE SYNCHRONIZING
7602 MIXTURE CONTROL
7603 POWER LEVER
7620 ENGINE EMERGENCY SHUTDOWN SYSTEM

77 ENGINE INDICATING

7700 ENGINE INDICATING SYSTEM
7710 POWER INDICATING SYSTEM
7711 ENGINE PRESSURE RATIO (EPR)
7712 ENGINE BMEP/TORQUE INDICATING
7713 MANIFOLD PRESSURE (MP) INDICATING
7714 ENGINE RPM INDICATING SYSTEM
7720 ENGINE TEMP. INDICATING SYSTEM
7721 CYLINDER HEAD TEMP (CHT) INDICATING
7722 ENG. EGT/TIT INDICATING SYSTEM
7730 ENGINE IGNITION ANALYZER SYSTEM
7731 ENGINE IGNITION ANALYZER
7732 ENGINE VIBRATION ANALYZER
7740 ENGINE INTEGRATED INSTRUMENT SYSTEM

78 ENGINE EXHAUST

7800 ENGINE EXHAUST SYSTEM
7810 ENGINE COLLECTOR/TAILPIPE/NOZZLE
7820 ENGINE NOISE SUPPRESSOR
7830 THRUST REVERSER

79 ENGINE OIL

7900 ENGINE OIL SYSTEM (AIRFRAME)
7910 ENGINE OIL STORAGE (AIRFRAME)
7920 ENGINE OIL DISTRIBUTION (AIRFRAME)
7921 ENGINE OIL COOLER
7922 ENGINE OIL TEMP. REGULATOR
7923 OIL SHUTOFF VALVE
7930 ENGINE OIL INDICATING SYSTEM
7931 ENGINE OIL PRESSURE
7932 ENGINE OIL QUANTITY
7933 ENGINE OIL TEMPERATURE

80 STARTING

8000 ENGINE STARTING SYSTEM
8010 ENGINE CRANKING
8011 ENGINE STARTER
8012 ENGINE START VALVES/CONTROLS

81 TURBOCHARGING

8100 EXHAUST TURBINE SYSTEM (RECIP)
8110 POWER RECOVERY TURBINE (RECIP)
8120 EXHAUST TURBOCHARGER

82 WATER INJECTION

8200 WATER INJECTION SYSTEM

83 ACCESSORY GEARBOXES

8300 ACCESSORY GEARBOXES

85 RECIPROCATING ENGINE

8500 ENGINE (RECIPROCATING)
8510 RECIPROCATING ENGINE FRONT SECTION
8520 RECIPROCATING ENGINE POWER SECTION
8530 RECIPROCATING ENGINE CYLINDER SECTION
8540 RECIPROCATING ENGINE REAR SECTION
8550 RECIPROCATING ENGINE OIL SYSTEM

MECHANICS CREED

UPON MY HONOR I swear that I shall hold in sacred trust the rights and privileges conferred upon me as a certified mechanic. Knowing full well that the safety and lives of others are dependent upon my skill and judgment, I shall never knowingly subject others to risks which I would not be willing to assume for myself, or for those dear to me.

IN DISCHARGING this trust, I pledge myself never to undertake work or approve work which I feel to be beyond the limits of my knowledge; nor shall I allow any non-certificated superior to persuade me to approve aircraft or equipment as airworthy against my better judgment; nor shall I permit my judgment to be influenced by money or other personal gain; nor shall I pass as airworthy aircraft or equipment about which I am in doubt, either as a result of direct inspection or uncertainty regarding the ability of others who have worked on it to accomplish their work satisfactorily.

I REALIZE the grave responsibility which is mine as a certified airman, to exercise my judgment on the airworthiness of aircraft and equipment. I, therefore, pledge unyielding adherence to these precepts for the advancement of aviation and for the dignity of my vocation.